

**Applicant:** Gordon Lowe  
**Application No.:** Not Yet Known

is aminolysed to provide the diphenylmethyl ester of N-t-butoxycarbonyl-trans-4-hydroxy-D-proline (V).

### REMARKS

The present application is being amended in order to recite the cross-reference to prior application 09/284,179, which is a §371 of International Application No. PCT/GB97/02820.

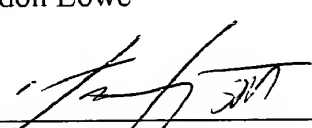
The paragraph on pp. 17-18 has been amended to be consistent with the "Sequence Listing".

Claim 17 has been amended to delete reference to multiple dependent claims. New claim 20 has been added. A marked-up copy of the specification and claim amendments is attached.

Early consideration and allowance of claims 15-18 and 20 are respectfully requested.

Respectfully submitted,

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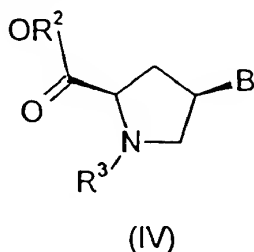
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Examiner: Not Yet Known

37 CFR §1.121(b)(1)(iii) and (c)(1)(ii)  
SPECIFICATION AMENDMENTS- MARKED UP VERSION

At pages 17-18, please replace the paragraph starting at line 29 on page 17 with the following replacement paragraph:

All four bases found in DNA were introduced into the glycyproline building units with the *cis*-D configuration and from these mixed cPNAs containing all four nucleobases have been made. The sequence GTAGATCACT, capped at its C-terminus with L-lysine was synthesized, and its binding properties with oligonucleotides investigated. Since it is important to determine the preferred orientation of binding of these novel CPNAs to oligonucleotides, both of the possible complementary oligonucleotides were prepared, *i.e.* [5'-CATCTAGTGA-3'] Sequence ID No. 2, and [5'-AGTGATCTAC-3'] Sequence ID No. 3, and hybridised with the chiral PNA. Their  $T_m$  values were 47°C and 43°C respectively indicating that the N-terminus of the cPNA preferentially binds to the 5'-terminus of the oligonucleotide, and the C-terminus to the 3'-terminus of the oligonucleotide. This is known as the antiparallel mode of binding, but it is seen that the stability of the alternative parallel binding complex is only slightly less stable.

15. (Amended) A compound of formula (IV)



where  $R^2$  is H or a protecting group,  
 $R^3$  is H or a protecting group compatible with  $R^2$ , and  
B is a protected or unprotected heterocyclic base[.] capable of Watson-Crick or Hoogsteen pairing.

17. (Amended) A compound as claimed in Claim 15 [or claim 16], wherein B is a protected or unprotected nucleobase selected from adenine, cytosine, guanine, thymine and uracil.